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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTENTION: HONORABLE Commissioner for Patents

P.O. Box 1450

In re the Patent of: TAKEMORI, Toshiyuki et al.

P.T.O. Confirmation No.: 6603

Patent No. 6,737,704

Issued: May 18, 2004

For:

TRANSISTOR AND METHOD OF MANUFACTURING THE SAME

REQUEST FOR CERTIFICATE OF CORRECTION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Certificate
JUL 0 2 2004

Mail Stop DAC June 30, 2004

Sir:

of Correction

The undersigned requests that a Certificate of Correction be issued for the above-identified patent as indicated on the attached Form PTO-1050.

This request is being made in order to correct an error in the claims. In claim 1 some information was omitted and some unrelated information was inserted. Please change claim one to be as it is shown in the Preliminary Amendment filed March 13, 2003(copy enclosed). These errors appear to be inadvertent clerical errors made by the Patent and Trademark Office. It is respectfully submitted that no new matter has been added.

Since this error is a Patent and Trademark Office printing error, it is respectfully submitted that no fee is required.

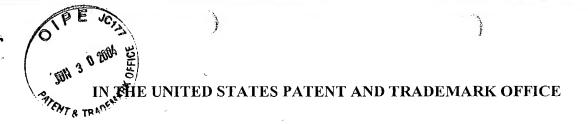
Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP

> Mel R. Quintos Attorney for Applicant Reg. No. 31,898

MRQ/lp Atty. Docket No. **001155** Suite 1000 1725 K Street, N.W. Washington, D.C. 20006 (202) 659-2930

23850
PATENT TRADEMARK OFFICE



In re the Application of: TAKEMORI, Toshiyuki et al.

Group Art Unit: 2814

Serial No.: 09/660,439

Examiner: Shrinivas (Steven) H. RAO

Filed: September 12, 2000

P.T.O. Confirmation No.: 6603

For: TRANSISTOR AND METHOD OF MANUFACTURING THE SAME

PRELIMINARY AMENDMENT

Commissioner for Patents Washington, D.C. 20231

March 13, 2003

Sir:

This is a Preliminary Amendment filed along with the Request for Continued Examination (RCE) filed March 13, 2003. Please amend the above-identified application as follows:

IN THE CLAIMS:

Claims 1 and 11 have been amended as follows:

1. (Twice Amended) A transistor comprising:

a semiconductor substrate having a semiconductor layer, a drain layer of a first conductivity type provided on said semiconductor layer and a conductive region of a second conductivity type formed by diffusing an impurity of the second conductivity type from a surface of said drain layer;

U.S. Patent Application Serial No. 09/660,439

a trench provided such that it extends from a surface of said conductive region to said drain layer;

a source region of the first conductivity type provided inner surface of said conductive region and exposed on side surface of said trench;

a gate insulating film provided on the side surface of said trench, an upper part of the gate insulating film being in contact with a lower part of said source region, a bottom part being in contact with an upper part of said drain layer, and a middle part being in contact with conductive region;

a gate electrode material provided in contact with said gate insulating film in said trench;

a source electrode film provided in contact with at least said source region exposed at least on the side surface of said trench and electrically insulated from said gate electrode material, said source region being substantially square when viewed from a direction parallel to said side surface of said trench, said source electrode film being contiguous and extending from an upper portion of said source region and a side surface of said source region, said contiguous source electrode film covering an opening of said trench in its entirety.

11. (Twice Amended) A transistor comprising:

a semiconductor substrate having a drain layer of a first conductivity type and a conductive region of a second conductivity type formed by diffusing an impurity of the second conductivity type from a surface of said drain layer;

U.S. Patent Application Serial No. 09/660,439

a trench provided such that it extends from a surface of said conductive region to said drain layer;

a source region of the first conductivity type provided in inner surface of said conductive region and exposed on side surface of said trench;

a gate insulating film provided on the side surface of said trench, an upper part of the gate insulating film being in contact with a lower part of said source region, a bottom part being in contact with an upper part of said drain layer, and a middle part being in contact with said conductive region;

a gate electrode material provided in contact with said gate insulating film in said trench;

a source electrode film provided in contact with said source region exposed at least on the side surface of said trench and electrically insulated from said gate electrode material, said source electrode film being contiguous and extending from an upper portion of said source region and a side surface of said source region, said contiguous source electrode film covering an opening of said trench in its entirety,

said source region being substantially square when viewed from a direction parallel to said side surface of said trench; and

a metal film formed on a surface of said drain layer opposite to said conductive region to establish Schottky contact with said drain layer.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.:

6,737,704

DATED :

May 18, 2004

INVENTOR(S):

TAKEMORI et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Claim1;

Column 12 starting on line 13 change

"surface of said source region, said contiguous source electrode film covering a plurality of openings of said trenches in their entireties,

said source region being substantially square when viewed from a direction parallel to said side surface of said trench; and

a metal film formed on a surface of said drain layer opposite to said conductive region to establish Schottky contact with said drain layer."

to be:

-- a trench provided such that it extends from a surface of said conductive region to said drain layer;

a source region of the first conductivity type provided inner surface of said conductive region and exposed on side surface of said trench;

a gate insulating film provided on the side surface of said trench, an upper part of the gate insulating film being in contact with a lower part of said source region, a bottom part being in contact with an upper part of said drain layer, and a middle part being in contact with conductive region;

a gate electrode material provided in contact with said gate insulating film in said trench;

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MAILING ADDRESS OF SENDER:

Patent No.:6,737,704

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K Street, NW, Suite 1000 Washington, DC 20006

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FORM PTO 1050 (REV. 3/82)

7 JUL 2004

UL 2000

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.:

6,737,704

DATED :

May 18, 2004

INVENTOR(S):

TAKEMORI et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

continued from page1

a source electrode film provided in contact with at least said source region exposed at least on the side surface of said trench and electrically insulated from said gate electrode material, said source region being substantially square when viewed from a directional parallel to said side surface of said trench, said source electrode film being contiguous and extending from an upper portion of said source region and a side surface of said source region, said contiguous source electrode film covering an opening of said trench in its entirety.--

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MAILING ADDRESS OF SENDER:

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